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A LIVABLE ENVIRONMENT FOR WILDLIFE IS QUALITY ENVIRONMENT FOR MAN

Montana Outdoors

Volume IV—No. 3 MONTANA FISH & GAME DEPARTMENT March, 1969

Feeding Deer to Death

By Robert H. Giles, Jr. and Ted McKinney

Reprinted from "National Wildlife" magazine—Dec.-Jan. issue 1968

Winter is a time of trial for many of the deer in North America. Wherever the temperature drops below freezing and snow covers the ground, their habits and physiology combine to make starvation and malnutrition a constant hazard, especially where their range is heavily populated. Worst lot of all falls to the white-tailed deer in the northern United States and Canada.

White-tailed deer are mainly browsing animals—which means their best diet is tips, twigs, and buds of bushes and trees. In winter, as the snow gets deeper, it is their habit to congregate in "deer yards," move to winter ranges, or seek sheltered areas. In a severe winter, or when too many deer try to gather in too small an area, they quickly eat all the available browse, even down to twigs as thick as pencils, as high as they can reach.

Then, c r o w d e d into a small space, they begin to starve. The smaller deer suffer worst, because only the big bucks and larger does can reach high enough in the trees for food. The fawns are first, then the smaller two and three-year-old deer. Even the survivors suffer from malnutrition. They become gaunt, lethargic, and even have difficulty running or standing. They offer a pitful picture with their bones showing awkwardly through unkempt fur.

Demand Action

At such times, people become very concerned with the welfare of "their" deer. Indeed, few who have seen the miserable animals could feel any other way. Led by hunters and nature-lovers, standing shoulder to shoulder, they storm conservation headquarters, demanding that something be done to feed the deer. If conservation agencies can't, or won't, many individuals and organizations take the matter into their own hands and feed the deer themselves.

The winter diets of wild deer are geared to rather specific plants. Handouts of artificial foods at this time are usually more damaging than beneficial.

As emotions rise, harrassed conservation agencies have been forced into artificial feeding programs, putting out alfalfa hay, corn, and other livestock feeds. Such feeding programs are very expensive and harmful to the deer in that they tend to concentrate even more around feeding areas, and around roadsides, causing a traffic hazard to themselves and motorists as well.

But feeding the deer, as almost all game managers now agree, was only treating a symptom. The real problem was and is overpopulation; the real solution was and is reduction of oversized deer herds by predation, hunting or some other method of population control. Even chemical sterilization and contraception have been tried, and research continues. Still, the demand for feeding has continued for decades—and the problems continued as well. One of these problems was a real mystery. Deer were found dead in yards and wintering areas, sometimes lying on a bed of hay with their stomachs full!

For years wildlife biologists puzzled over the mysteries of the starved deer with full stomachs. It took about 15 years of detective work to find the answer but now they know, and now they have their strongest argument against artificial feeding of deer.

The story is a rather long one, but worth telling in detail:

Deer are ruminants, like cows. That is, they have four compartments in their stomachs, each with a particular function. Bits of browse, grass and other herbs are swallowed, and pass in balled-up cuds into the first compartment, the rumen. There it mixes with digestive juices that contain billions of microbes—tiny plants and animals commonly called microflora and microfauna.

Four Stomachs

The food then shifts back and forth from the rumen to the second stomach, the reticulum, mixing with the juices, then on through the other two compartments, the omasum and the abomasum. But even four stomachs could not digest the woody fibers of browse without those microorganisms. They thrive on browse, especially the hard to-digest woody portions. In doing so, they change the woody materials into more digestible food for the deer. Even the microorganisms themselves go on through the digestive process, contributing protein to the host deer's diet.

Though deer are not born with a supply of these microorganisms, they get them from plants, soil, the air, and the mother deer. By the time they are two months old and browsing, they are well supplied. The microbes are made up of a variety of species, depending on the plants the deer eat. As a matter of fact, they are so specialized that they can only work efficiently on specific items in the deer's natural diet. Any sudden change in the deer's diet can stop their action, and mean serious trouble for the host deer.

During the winter, as the deer work harder and harder for browse, their diet becomes more and more woody. The microbes adapt to the change, though badly, and the deer may begin to suffer from malnutrition.

In that condition, the deer will readily accept artificial foods. But the high-quality foods—hay, corn and cattle feed—usually offered in feeding programs are too much for the little organisms inside them. When the deer's supply of micro-organisms is gone, the deer can no longer digest any food and they die of starvation, in the midst of plenty, with their stomachs packed with expensive, high-quality food!

To make matters worse, another factor works against the microbes as well. When the deer's diet is of poor quality in winter, the bacteria that depend on ammonia may be low in numbers. But high-quality livestock feeds are very high in ammonia. As a result, ammonia poisoning may occur or the surplus may form urea, some of which may be absorbed in the bloodstream, where it poisons the deer.

Difficult to Explain

The problem of informing the well-meaning public that they can feed their deer to death is an enormous one. These facts of deer nutrition are hard to explain and hard for people to understand. Yet their importance is vital, for well-meaning people may be causing more harm to deer than the natural hazards of winter.

If winter starvation and malnutrition are only symptoms, and the disease is overpopulation, what can be done to help?

Most important is population control. Natural predators can help keep deer herds in check, but there are no longer enough large predators to do the job. Game management, especially through controlled hunting, can replace natural predators to a great extent reducing populations to healthy levels, which in turn insures that natural winter food will be enough to get the herd through until spring.

Providing more good year-around food for the deer is another approach. Several states schedule commercial timber sales on state game lands, systematically removing large trees to that more small brush and trees can grow where deer can reach them. In addition, the cutting leaves tops and tips of the trees on the ground for deer, especially if the cutting is done in the winter, when food is in short supply. In addition to timber management, habitat can be managed by planting good browse in the cut-over areas, to create even better wintering range. In some locations, planned fires produce the same effect.

Browse Cutting Operations

At least five states are spending time and money on a stopgap method—cutting natural browse around wintering areas to get the food within the reach of the deer. In some states, sportsmen's and conservation groups rally to help with axes and chain saws on areas where permission is obtained for browse cutting. One northeastern state employs "Food and Cover Corpsmen" to cut browse for its heavy deer population. During some years, that state has spent over a half million dollars to cut browse on 10,000 or more acres. This method has the added advantage that it is an active, satisfying way to try to help.

Unfortunately, biologists point out that browse cutting to help deer is like taking aspirin for a brain tumor—it doesn't solve the big problem of overpopulation. Nor can a few hundred or thousand men with chain saws cut enough browse to help a significant number of deer.

MONTANA OUTDOORS

Published monthly by the Montana Fish and Game Dept., Mitchell Building, 125 Roberts St., Helena, Montana 59601

Second class postage rates paid at Helena, Montana 59601

It is a paradox that, when deer need help the most, we cannot give it to them. The help that seems the cruelest—population control—is the most merciful.

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VANISHING WILDLIFE MAKE WAY FOR GRASS

By Steve Bayless

The Missouri River Breaks in south Blaine county have long been known for their wild, remote beauty and for fine mule deer, sage grouse and other wildlife. In fact, this area with its many acres of public lands is considered by many as a sportsmens' paradise. Its high value for antelope, mule deer and sage grouse has been unquestioned, but the game is "getting the boot." They are getting the boot because man is changing the environment so it is no longer suitable for many kinds of wildlife.

A primary interest of any fish and game department, in sustaining healthy game and fish, is the preservation of a suitable environment in which these animals may live. In man's haste to shape environmental features to his liking, it is often made unsuitable for fish and wildlife, especially for the native species that most of us like to have around. Opposition to many kinds of wildlife habitat destruction has been growing and, when organized, can successfully slow down or mitigate damage to the natural environment. A good example is Montana's Stream Preservation Law, a law which is helping to maintain the physical features of streams that are desirable for fish, especially trout. There are, however, many other often single purpose programs which destroy wildlife habitat and defeat the multiple use concept on public domain lands. One such program is the eradication of great expanses of sagebrush on public lands, and that is the point of this article.

The Missouri River Breaks remain much today as when first described by Lewis and Clark during their epic journey in 1804. But very gradually a change is taking place. The change first affects distinctive plant life of the breaks—a vast pine-sagebrush complex that stretches for miles and miles over the intricately chiseled landscape. But with certainty, as the vegetation is changed, there is a change in animal life, for animal life is inescapably tied to distinct kinds and qualities of vegetation.

The importance of sagebrush to antelope is well known. This plant forms around three-fourths of the winter diet of antelope, and without sagebrush, antelope face starvation during the winter months.

In a three-year study of mule deer and elk in the Missouri River Breaks, it was found that big sagebrush was the single most important food plant for mule deer during the summer and fall. Also, mulies made extensive use of sagebrush up to one-half mile away from the edge of the Ponderosa Pine belt that extends through the breaks. Many other Montana studies have established the dependence of game and non-game animals and birds on sagebrush and sagebrush-associated plants.

Sagebrush is sprayed, or otherwise destroyed for one purpose—the production of more grass to feed more livestock. During 1965, the Fish and Game Department became alarmed over the momentum that sage-spray projects were gaining. Certain criteria for investigation of sage destruction projects were developed. These stated that "important wildlife habitat located within or as a part of a sagebrush control project **should not** be sprayed (or treated) by an agency unless it could be demonstrated that the treatment was not detrimental to wildlife." Other state game departments have also expressed their concern and opposed destruction of sagebrush on public lands. The Western Association of State Fish and Game Commissioners has issued guidelines for the preservation of sagebrush habitat. These guidelines are backed by meticulously collected information — information which shows without a doubt that the life requirements of such game as antelope, sage grouse and in many areas mule deer, and other non-game species are tied by a life and death bond to sagebrush environment.

In an effort to learn more about the **total** effects of sagebrush destruction, a research project area was initiated near Winnett in central Montana. This is a coopera-

tive study financed by department and Bureau of Land Management funds. Fish and game personnel were contracted to carry out this important research. It now appears, however, that considerable sagebrush eradication will not await the results of the study. The spraying, burning, rotobeating, and other sagebrush destruction methods continue, and the requirement of wildlife is not considered in most projects. The loss of wildlife habitat continues. Ironically, much of it is habitat identified as important for wildlife.

During 1965, the BLM sprayed for sagebrush eradication, approximately 1,000 acres of pine-sagebrush range in the Missouri Breaks at the head of Right Coulee, even though this area contained some of the most important mule deer habitat in the Malta district. The area was block sprayed and the all-important "edge" or junction between sagebrush and pine was destroyed along with the abundant forbs, or flowering plants, that are so important to mule deer, sage grouse and antelope as food during the spring and summer. The following year, spray planes spewed herbicides for "range improvement" over another 4,000 acres of prime wildlife habitat along both sides of Bullwhacker's Coulee.

In 1967, the sprayers again visited the Breaks, this time leaving over 4,000 acres of dead or dying sagebrush at the head of Bullwhackers Coulee. This past year, the latest efforts destroyed another 4,000 acres, and the same is scheduled for 1969, 1970 and 1971. Unless there is a change in the philosophy soon, the outlook for sagebrush and game animals in the Missouri Breaks is bleak. This loss can be ill-afforded by sportsmen, recreationists, and others interested in the future of outdoor enjoyment.

"Improvements" in the Breaks are not restricted to BLM administered lands. The Soil Conservation Service has recommended similar projects on certain private lands where the cost-sharing program provides that the federal government pays 80 percent of the cost and the private landowner 20 percent. Although the acreage of the SCS sponsored program was not determined, it is expected that the additional area involved approaches that treated so far by the BLM, and that some state lands are also involved. The Fish and Game Department is notified to investigate effects on wildlife of pending BLM sagebrush treatment projects, but not so with SCS projects.

No other bird animal is so closely tied to sagebrush as the sage grouse. Studies have shown that over three-fourths of the year-long diet of this bird is sagebrush, and during winter, nearly all of the diet is sagebrush.

Anyone who has seen first-hand the results of a sage eradication project will not dispute the fact that the result is, in fact, more grass. But in some of the treated areas in the Breaks, an approved management plan did not exist at the time of treatment, and cattle use was not properly managed, either before or after spraying. To confound the practice, sagebrush plants are reappearing on treated lands. This certainly leaves a question as to the long range value of fighting nature. Sagebrush is a natural occurring plant in the Breaks because soil, climate, and moisture conditions are right for its development. Whether or not sagebrush was as dense before the advent of livestock grazing is a matter of conjecture. It's known that sagebrush and other "undesirable" plants, from livestock operators' point of view, increase with heavy livestock grazing. Would proper stocking and grazing of public ranges by domestic livestock alleviate the need to spend large sums of public monies for future poisoning of sagebrush?

Fish and Game workers support proper management of public lands. There is certainly room for more use on these lands, and multiple use management can become a reality if given a chance. But there is a serious question in present management attitudes, actions, and policies in certain public land management policies. The general public, and specifically the outdoor interests have been largely apathetic, even though they help foot the bill that whittles away at game habitat. These interests must demand a fair shake for wildlife on public lands and management that will embrace all beneficial uses.

Sage brush is very important in diets for mule deer on many winter ranges, including those in the Missouri breaks.

SUMMARY OF FISH & GAME LEGISLATION 1969

HB 51—Salmonid fishes or fish eggs will now have to be certified as free of whirling disease, and other diseases the Fish and Game Commission may specify, before they can be legally shipped into Montana. The salmonid fishes include our trout, salmon, and the chars (Dolly Varden and brook trout). Responsibility of certification lies in the state of origin. Salmon caught and brought directly into North America and transported into Montana for processing or sale, or any salmonid caught in the wild are exempt from certification requirements.

HB 52—This law better defines the requirements for the tagging of big game animals and provides for change in the makeup of game tags. For example, it will no longer be required that hunters write on the tags the county in which their game animals are killed. Signatures and conservation license numbers will be added to most game licenses at the time they are issued, and big game hunters will need only cut out the month and day of kill when tagging a game animal.

HB 53—Game workers are now able to determine, within limits, the ages of grizzly bears by examing their skulls and teeth. This information on the age makeup of our grizzly population is very important, but it has been difficult to gather as most bear carcasses, including skulls, are left at the site of kill. The Fish and Game Commission now has the authority to manage the grizzly as an endangered species and may establish such regulations as requiring grizzly hunters to deliver portions of their kills to the Fish and Game Department. Skulls and any other bone structures will be returned to the hunter within one year upon written request.

HB 54—In the past, it has been the habit of some chain stores to establish a license agency in one area and distribute licenses from such an agency to other stores situated within the state. This practice not only caused considerable administrative problems to the fish and game, but also put additional license agents into areas which already had adequate service. License agents will now be required to operate from a single location of business. The location will be stated on each certificate of appointment.

HB 57—The conglomerate lands administered by the Recreation and Parks Division are classed variously as state parks, recreation areas, monuments, recreational access sites, etc. This law will give some criteria for the naming of such areas, and by these criteria will show the relative values of state recreational lands. Such criteria will determine appropriate development and management procedures as well as serving standards for acquisition, designation, and redesignation of park system components.

HB 70—A number of bills were introduced this session aimed at preventing the harassment of game animals by snowmobilers. House Bill 70 amends an existing law so that "It shall be unlawful for anyone to use a self-propelled vehicle to intentionally concentrate, drive, rally, stir up or harass game animals, game birds or furbearing animals." An existing law prohibits persons to shoot or take game animals, game birds, or furbearers from a vehicle.

HB 73—Previously nonresidents were authorized to fish if they held a seasonal license ($15.00), a $150.00 game and fish license, or a six-day license ($5.00). The less avid fishermen who would like to try some of our famous trout streams for a day or two are hesitant to invest in any of these licenses. Nonresidents will now be able to buy a one-day fishing license for $1.00. The first day, however, will actually cost $2.00 as a non-resident $1.00 Conservation License is required before they can purchase any other fish or game license.

HB 75—This was essentially a companion bill to HB 480 which requires a Conservation License. It will require all license buyers to subscribe to certain statements and is aimed at preventing people from fraudulently obtaining hunting or fishing licenses.

HB 79—There are many instances in which the Fish and Game Commission can get construction jobs done considerably cheaper and faster by negotiating directly with contractors on nearby jobs, rather than going through a complicated and time consuming procedure of bid letting. Hauling in equipment is sometimes more costly than the construction itself, and contractors are often unwilling to bid on small jobs beyond their immediate areas of operation. The commission may now contract jobs of less than $5,000.00 cost estimate, and may contract for construction projects of $1,000 or less without providing for plans or specifications, notice, competitive bidding, or performance bonds.

The Fish and Game Commission will now be able to take advantage of equipment which is near construction sites and by directly negotiating for small jobs.

HB 81—The national act for the preservation of historic sites provides for grants-in-aid to states and local sub-divisions of the state for acquisition and preservation of historic sites. In order to participate under this act and receive federal funds for these purposes, a comprehensive state-wide plan for the preservation of historic sites must be written and approved by the Secretary of Interior.

Matching funds on a 50-50 ratio may be available on a limited basis to help finance the planning process. An appropriation of $25,000.00 for preparation of the plan was asked. The Commission was granted $2,500 for that purpose.

HB 117—Previously, motorboats of more than 10 horsepower were required to be certified every third year by the Board of Equalization. Under the new law, motorboats of more than eight horsepower will have to be certified and bear identification numbers. The Board of Equalization will continue to be the administrative body.

Certification is good for only one year and will have to be renewed at $1.00 each year. The Board of Equalization will issue a pair of number decals with all new certificate of numbers and with each renewal.

HB 226—Under this bill, a Montana resident who is 65 years old or older is required to have a token fifteen cent "Pioneer License" to fish or hunt game birds. The purpose of the token license is to get a complete count on license buyers so the state will get full share of moneys from federal excise taxes on sports fishing and hunting equipment. This money is allotted back to states on the basis of the number of license buyers and the size of the state. These funds are earmarked for certain fish and game purposes.

Veterans of any V.A. hospital

will also be able to fish in Montana on a fifteen cent license issued by the heads of hospitals. Residents of state institutions, with the exception of state penitentiary inmates, will be authorized to fish under a free permit signed by the heads of respective institutions.

HB 270—Under House Bill 270, state game wardens will be given more responsibilities. Wardens will now have the power of ex-officio fire wardens and will be required to enforce litter and vandalism laws on private lands where public recreation is permitted. The act is intended to improve landowner-recreationist relationships.

HB 336—Under the Federal Gun Control Act of 1968, each state is required to have enabling legislation before residents can buy firearms from an adjacent state. House Bill 366 enables residents of Montana to buy rifles and shotguns in a state contiguous to Montana, and provides that citizens of adjoining states may buy rifles or shotguns within Montana so long as there is conformation with provisions of other applicable laws.

HB 366—Instruction in various phases of law enforcement are presented to classes at Montana State University. Several phases of enforcement are covered each year. Inclusion of a fish and game member on the advisory board of the Law Enforcement Academy will provide for the Fish and Game Commission to help establish policy for the school programs.

HB 359—This act requires that "all drawings for elk permits shall be held in the city or town which has suitable accommodations nearest to the area to be hunted."

This means that persons can no longer apply for elk drawing by mail but will have to attend registration for elk drawings in person.

HB 418—The Montana Fish and Game Commission may now set spearfishing regulations for the taking of walleye, sauger, and northern pike. This will be essentially a winter fishery as it can be done successfully only from the confines of a darkened ice shanty.

HB 450—This reserves the unappropriated waters of the following streams or portions of streams for fish, wildlife and recreation: Big Hole, Blackfoot, Flathead (including the part commonly called North Fork), Gallatin (including the part commonly called West Gallatin), Madison, Missouri (from Toston Dam to the mouth of the Smith River), Smith, Yellowstone (from the Park boundary to the Carbon-Stillwater county line), Middle Fork Flathead, and South Fork Flathead rivers and Big Spring and Rock creeks.

The appropriations of waters for fish and game purposes are, however, conditional and may be declared secondary to other uses by district courts.

HB 480—In order to get a complete count of hunters and fishermen, to bring the fish and game licensing system in line with auditing recommendations and to otherwise implement the fish and game licensing system, a $0.25 resident and $1.00 nonresident Conservation License must be purchased before any other game or fish license can be bought. Residents 65 or older will not need this Conservation License to fish or hunt most game birds, but they will need it in order to buy any big game license or a turkey tag.

HB 503—This law would create a Motorboat Certificate of Identification Account and earmark these funds for motorboat law enforcement to the administration by the Fish and Game Department. Previously, sheriffs and other peace officers were required to enforce the motorboat registration law, but nearly all enforcement was by state fish and game wardens.

Senate Bills

SB 20—The Montana Fish and Game Commission will now be responsible for licensing of roadside menageries and other exhibits of wild animals which are used for the purpose of attracting trade.

An annual permit will be required of persons having such exhibits, and the commission will establish standards for both the well being of penned animals as well as for viewers.

Non-profit zoological exhibits and traveling theatrical or circus exhibits are exempted.

SB 210—This act was an amendment to a previous anti-litter law and puts more teeth into them. The law prohibits littering of private and public property where recreation is permitted and ups the fine for doing so from $25.00 to $100.00.

SB 227—This act repeals segments of a law enacted at a time when beaver were very valuable and sustained tremendous trapping pressure. It gives beaver the same regulatory status as apply to other furbearers and does away with the time consuming and complicated special permit and tagging system.

SB 275—When, upon recommendation of the state forester, the governor declares an area closed to trespass because of fire danger, the area will also be closed to hunting and fishing.

Z 91—This act amends the current council on natural resources to orient it more specifically toward water problems in the state. The basic change is to enlarge the council to include one member from the outdoor recreation field, member from Water Well Contractor's Examining Board, Secretary of the Water Pollution Council and a member of the Sanitarians Registration Council.

MONTANA AGAIN RECEIVES NATIONAL RECOGNITION FOR HUNTER SAFETY PROGRAM

Montana has again received national recognition for its hunter safety program. Lt. Governor Tom Judge accepted the National Rifle Association award of merit for "outstanding achievement in the field of hunter safety during the year of 1968" in behalf of Montana. The award was presented by Ray Hoem of Big Timber, a member of the NRA Board of Directors. Montana received the top international award in 1967 and therefore cannot be eligible for top honors again for at least five years. In addition to the first place in 1967, Montana has been listed in the top ten in the nation seven times since the program was initiated.

The NRA award was presented at the fifth annual hunter safety instructors banquet and training session held in Helena on March 15 and 16. Other awards were presented at the banquet by the Montana Fish and Game Commission to various instructors for their individual achievements. George Rediske, chief instructor of Park county, received the highest individual award of the evening in recognition of his having taught over 1,000 students in the Mon-

tana Hunter Safety course during the more than ten years of service he has put in. A Gold Award for having taught 500 students was earned by John Harasymczuk of Miles City, but he was not present to receive it. Plaques were also presented to all instructors who had worked with the program for ten years or more and to all county chief instructors who had served in that capacity for three years or more.

There were approximately 160 people in attendance at the awards banquet, the largest attendance since the banquet and training sessions began. Grant Sanborn, western representative for the National Rifle Association, was the master of ceremonies and the awards were presented by Lt. Governor Judge and also by Frank Dunkle, director, and Dick Munro, chief of information and education, of the Montana Fish and Game Department. Special recognition was given to Arnold Rieder who, as a representative in 1957, secured the passage of Montana's hunter safety law, and who later, as a senator, secured amendments to strengthen the law.

Dave Hardin of the training activities session of the NRA, Washington, D.C., was the main speaker at the accompanying training session. In addition to the main training session conducted by Mr. Harding, a portion of the morning was given to discussion of the new Gun Control Act of 1968. Phil Droke of the alcohol, tobacco and firearms division of the Internal Revenue Service in Helena, spoke on the new law and conducted a question and answer session.

Lieutenant Governor Tom Judge, left, accepts the N.R.A. award for hunter safety in behalf of Montanans. Ray Hoem of Big Timber, Montana, a member of the N.R.A. Board of Directors, makes the presentation.

Spring Season for Tom Turkeys

There's another spring turkey season in the making, so hunters had best blow the dust off their "yelpers" and perfect calling techniques. The Fish and Game Commission has set the spring hunt to begin noon, May 1 and to close May 18.

The spring season will be limited to hunting of male turkeys only. Hunting hours will open noon on May 1, but will be one-half hour before sunrise to one-half hour after sunset the remainder of the season. Hunters may use a shotgun no larger than 10 gauge, long bow and arrow, rifle or hand gun.

Each hunter will need a special $2.00 turkey license in addition to a game bird license. Residents 65 and older need only have a $0.25 Conservation License and a turkey license.

Open areas will be:

Fergus County: Fergus County in its entirety.

Phillips County: Phillips County in its entirety except the following described area shall be closed: Sipary Ann Station, Section 36, Township 22 North, Range 24 East and Section 31, Township 22 North, Range 25 East, as posted.

Ashland Division: (Ashland-Fort Howe District) That portion of the Custer National Forest known as the Ashland Division within the following described boundary: Beginning at the junction of U. S. Highway 312 and the Miles City-Tongue River-Ashland Road, thence in a southerly direction along said road to the Brandenberg Bridge on the Tongue River, thence in a southerly direction up the Tongue River to the Montana-Wyoming state line, thence in an easterly direction along said state line to the Powder River, thence in a northeasterly direction along the Powder River to the U.S. Highway 212 Bridge near Broadus, thence in a westerly direction along U. S. Highway 212 through Broadus to the junction of Highway 312, thence in a northerly direction along U.S. Highway 312 to the junction of the Miles City-Tongue River-Ashland Road, the point of beginning.

Sioux Division: (Long Pines Area) That portion of Custer National Forest known as the Long Pines area within the following described boundary: Beginning at Sykes Bridge and Box Elder Creek, thence in a northerly direction down Box Elder Creek to the bridge on the Mill Iron-Camp Crook Road, thence in a south easterly direction on the Mill Iron-Camp Crook Road to the South Dakota state line, thence south along the South Dakota state line to the Tie Creek Road, thence west and northerly along the Tie Creek Road to Sykes Bridge, the point of beginning.

The art of turkey hunting has

good promise in Montana, and a true art it is for the hunter who cares to match wits with the cunning, keen-eyed birds. During the spring hunt period, gobblers are in their best plumage.

Calling, or "yelping" for turkeys is considered the most skilled and most rewarding form of turkey hunting. Ring-wise gobblers are more difficult to lure in than are young lonesome fall turkeys trying to find a flock.

Artificial turkey calls come in a variety of sizes and shapes ranging from quarter-size to those larger than the old fashioned match boxes. The slate type caller has held its own over the years and is a tried and true method of imitating the calls of wild turkeys. Regardless of the type of call preferred, the success lies in the skill of the user.

During the fall, hunters try to call in birds that have been separated from a flock, but during the spring gobblers are listening for the seductive yelps of lovelorn hens. The spring caller must be persistent and expert in his imitations. Records have been made as an aid in tutoring novice yelpers. A barnyard flock on the back forty also offers a good opportunity for yelpers to listen and to try to imitate the various types of turkey talk.

Since turkey hunting is relatively new in Montana, there aren't a great number of skilled callers, and stalking has been the most common method of hunting. The stalker must be extremely cautious, however, as turkeys probably have the keenest eyesight of any game bird or animal. They are very sensitive to color and the flash of a white face is enough to send them scurrying.

Stalkers will often listen for gobbling turkeys and then try to locate the source. Unlike many of our game animals and birds, turkeys will often hold tight and wait till they can see what's making a sound before they flush. Keeping hidden, then, is generally more important than quietness. This doesn't mean that the turkey hunter should go out of his way to make noise.

There's argument as to the best gauges, calibers, and shot size for bringing down the big birds. As a rule of thumb, the larger the gauge the larger the shot size it affords. So far as caliber is concerned, nimrods in states where turkey hunting has a long history feel that a 22 rimfire is just not potent enough to stop a turkey cold unless it's been hit in a vital spot. Whatever the hunting method, or the weapon, hunters will find that taking the "king of game birds" is a challenging and rewarding sport.

MONTANA
FISH AND GAME DEPARTMENT

HELENA, MONTANA 59601
Return Postage Guaranteed

MONTANA OUTDOORS
Published monthly by the Montana Fish and Game Dept., Mitchell Building, 125 Roberts St., Helena, Montana 59601
Second class postage rates paid at Helena, Montana 59601

MARCH, 1969